EARLY BRONZE AGE SEAL IMPRESSIONS FROM KEOS[1]

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Excavations conducted since 1960 by the University of Cincinnati at Ayia Irini on the island Keos[2]) have produced more than seventy fragments of pottery carrying the impressions of stamp seals and *Kerbschnitt*[3]). This impressed pottery comprises one complete hearth (figs. 53 and 54) shaped like a keyhole (*CMS.* V no. 470), many rim fragments from other hearths and vessels, and several body sherds from pots.

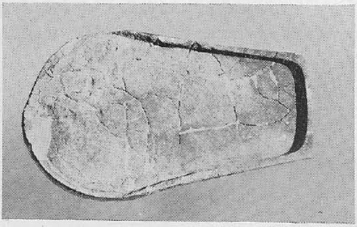

Fig. 53: CMS. V Nr. 470

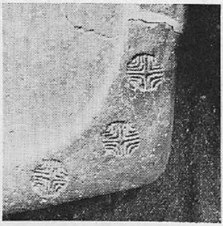

Fig. 54: CMS. V Nr. 470 (Detail)

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[1]) I am grateful to Prof. J. L. Caskey for his permission to study this material. Dr. I. Pini has graciously allowed me to use the superb drawings by Mrs. Alice Fäthke. Appreciation is also owed to Dr. Martha Heath Wiencke for her invaluable advice.

[2]) The following preliminary reports have been published: J. L. Caskey, *Hesperia* 31, 1962, 263 ff.; *Hesperia* 33, 1964, 314 ff.; *Hesperia* 35, 1966, 363 ff.; *Hesperia* 40, 1971, 359 ff.; *Hesperia* 41, 1972, 357 ff. An abstract of the present paper appears in *AJA* 76, 1972, 225. See also a recent article by J. L. Caskey, *Archaeology* 23, 1970, 339 ff. — The seal impressions are now published by J. L. Caskey in *CMS.* V nos. 451 ff. In this paper the Kea and Lerna impressions are cited according to *CMS.* V.

[3]) Although this report concerns only the impressions made by stamp seals, the hearth rims with *Kerbschnitt* are mentioned to align this material with similarly impressed hearths from Tiryns (K. Müller, *Tiryns* IV pl. 15, 3), Askitario (D. Theocharis, *Arch. Ephim.* 1953/54, III, 73 fig. 25) and Eutresis (H. Goldman, *Excavations at Eutresis* 97 fig. 124, 1).

cf. MME Nichoria
II 26 ff.

The keyhole-shaped hearth was found in Room 1 of an Early Bronze Age building, "House E"[4]). Directly beneath it was found a similar hearth (K. 4081), so poorly preserved that no seal impressions, if there were any originally, are observable. Both hearths were fired *in situ*.

Most of the rim fragments and body sherds were found in the other rooms of "House E", especially in the filling of Room 3. The pottery associated with this impressed material and with the two hearths consists of sauceboat fragments and related wares which, in the northeastern Peloponnese, have been assigned to the Early Helladic II period. It is probable, therefore, that the impressed pottery from Ayia Irini also dates to E. H. II, although it must be cautioned that not all the relevant contexts have yet been completely studied.

The more than seventy impressed fragments carry the imprints of fifty-nine different stamp seals. For convenience these impressions may be divided into two main groups plus a smaller class comprising two impressions. The majority of the stamped pieces bear the motifs of concentric circles and spirals. There are thirty-two impressions comprising concentric circles (figs. 56 and 57), differing in size of the impression (1.1 to 2.1 cm.) and number of circles (two to seven, five circles appearing the most often). Each of two rim fragments, *CMS.* V nos. 451, 452 (fig. 55) carries the impressions of two types of concentric circles. On the first of these, one impression is smaller than the others and is placed where the rim begins to turn a corner. On the other fragment, the

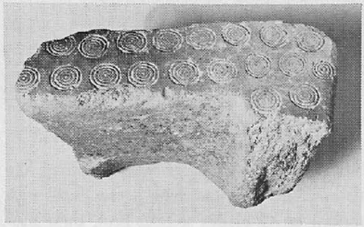

Fig. 55: CMS. V Nr. 451

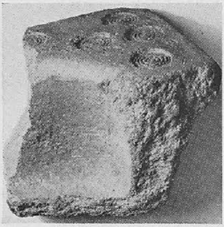

Fig. 56: CMS. V Nr. 453

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[4]) For a discussion and plan of the area see *Archaeology* 23, 1970, 340 and *Hesperia* 40, 1971, 369 ff.

smaller seal impression appears near the corner of the rim obviously as a filler.

The second most common motif is the spiral. Eight types can be recognised, both single (fig. 58) and interlocking (fig. 59). The retorted spiral occurs rarely at Ayia Irini; there is one on a sherd of the Cycladic "Frying Pan" type (K. 3563).

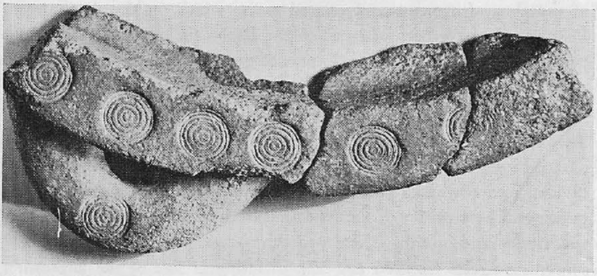

Fig. 57: CMS. V Nr. 454

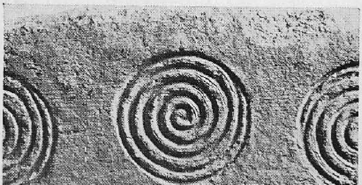

Fig. 58: CMS. V Nr. 456

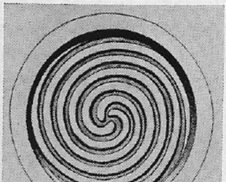

Fig. 59: CMS. V Nr. 459

The predominance of concentric circles over other motifs and of the single and interlocking spirals over the retorted type agrees well with Mrs. Fischer-Bossert's observations on Cycladic taste[5]). Both these motifs, therefore, may be thought to form one group expressing a Cycladic style.

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[5]) E. M. Bossert, *JdI.* 75, 1960, 1 ff., especially p. 10.

A second group of seal types shows similarities primarily to those from Lerna which date to E.H. II⁶). A curvilinear pattern interrupted by chevrons on *CMS*. V no. 466 (fig. 60) resembles Lerna *CMS*. V no. 82; it may also reflect the motif on the well-known pot from Zygouries⁷). The complex swastika of *CMS*. V no. 474 (fig. 61) is similar to Lerna nos. 76 and 80. A cross with hook filler, Kea no. 461 (fig. 62), resembles the schemes of Lerna nos. 80 and 87. The motif of arrows and central filler on Kea no. 475 (fig. 63), a handle fragment, is remarkably close to Lerna nos. 94 and 95. The pattern of a cross which branches into spirals on Kea no. 465 (fig. 64) should also be included in this group; cf. Lerna no. 99.

The chevroned cross on the hearth *CMS*. V no. 470 (fig. 53 and 54) has many parallels; examples come from Lerna no. 52, Chalandriani Poliochni, and Crete⁸). Three other designs from Kea are related to the motif of chevroned cross: the design on *CMS*. V no. 471 (fig. 66), one quadrant of which contains one more chevron than the others; the motif on no. 472 (fig. 67), one quadrant of which bears a schematic floral pattern; and no. 473 which carries a symmetrical design of chevrons and lozenges (fig. 68).

Three other designs which also belong to this second group exhibit similarities to material from Crete as well as from Lerna. *CMS*. V no. 464 carries an impression with scalloped border and naturalistic filler (fig. 69) resembling Lerna no. 115, a design from Asine⁹), and two later sealings from Phaistos (*CMS*. II 5. 91 and 92)¹⁰). A composition perhaps

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⁶) For a discussion of the E. H. II glyptic from Lerna see Martha Heath Wiencke's articles in *Hesperia* 27, 1958, 81 ff., *Hesperia* 38, 1969, 500 ff., *Hesperia* 39, 1970, 94 ff. and *CMS*. V nos. 35 ff.

⁷) C. W. Blegen, *Zygouries* (Cambridge, Mass. 1928) 106 fig. 91, 1. *CMS*. V no. 503.

⁸) Chalandriani: E. M. Bossert, *Arch. Delt.* 22 A, 1967, 70, 74 fig. 5, 10. — Poliochni: L. Bernabò Brea, *Poliochni* I (Rome 1964) 2 pls. 175, 5 and 170, 4 (cf. pl. 168, 9). — Crete: *BSA*. 26, 1935/36, 95 fig. 21, 5 from Lasithi. *CMS*. II 1 no. 107 from Ayios Onouphrios. *CMS*. II 1 no. 428 from Trapeza.

⁹) O. Frödin — A. Persson, *Excavations at Asine* (Stockholm 1938) fig. 172, 5. *CMS*. V no. 519.

10) Anatolia also provides a few parallels for the design on *CMS.* V no. 464 approximately contemporary with the sealings from Phaistos: Karahüyük (S. Alp, *Zylinder- und Stempelsiegel aus Karahüyük bei Konya* (Ankara 1962) nos. 258 and 259; cf. also nos. 80—85, and 94) and Mersin (J. Garstang, *Prehistoric Mersin* (Oxford 1953) 216 fig. 130 left).

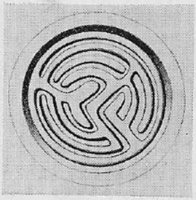

Fig. 60: CMS. V Nr. 466

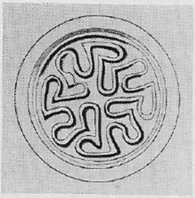

Fig. 61: CMS. V Nr. 474

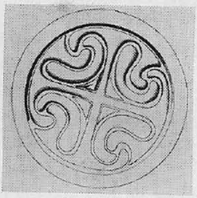

Fig. 62: CMS. V Nr. 461

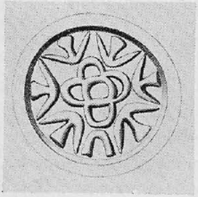

Fig. 63: CMS. V Nr. 475

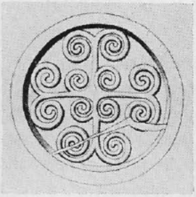

Fig. 64: CMS. V Nr. 465

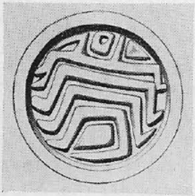

Fig. 65: Impression from Chalandriani

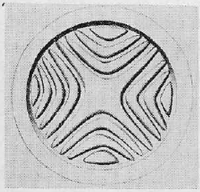

Fig. 66: CMS. V Nr. 471

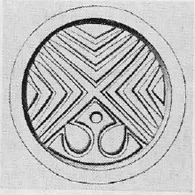

Fig. 67: CMS. V Nr. 472

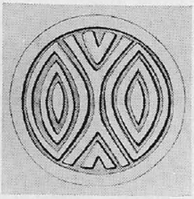

Fig. 68: CMS. V Nr. 473

related to Lerna no. 102 and to two seals from Lebena (*CMS.* II 1. 181 and 182) may be seen on no. 462 (fig. 70), a negative design[11]), and no. 463 (fig. 71). Two designs with C-spirals, a negative one on no. 467 (fig. 72), a jar with one impression on both neck and handle, and a

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[11]) By negative design I mean one which was carved in relief on the seal, not in intaglio. As far as I know, the impressions from Keos provide the only examples of negative designs; cf. however, *CMS.* II 1. 428 from Trapeza.

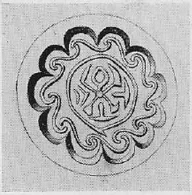

Fig. 69: CMS. V Nr. 464

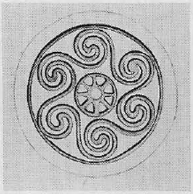

Fig. 70: CMS. V Nr. 462

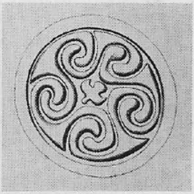

Fig. 71: CMS. V Nr. 463

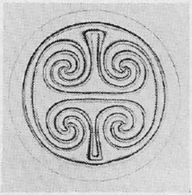

Fig. 72: CMS, V Nr. 467

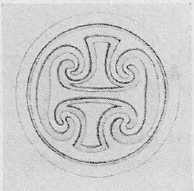

Fig. 73: CMS. V Nr. 468

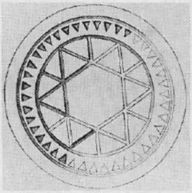

Fig. 74: CMS. V Dr. 476

design on no. 468 (fig. 73), find close parallels at Lerna, nos. 45 and 51. They also anticipate the motifs from Phaistos (*CMS.* II 5. 194) and Tholos A at Ayia Triada (*CMS.* II 1. 25). The Star-of-David pattern (fig. 74) on no. 476, again a negative design, has parallels only with later sealings from Phaistos (*CMS.* II 5. 141—148, 150, 151).

The negatively cut designs on these three sherds, nos. 462, 467 and 476 imply that the motifs were best legible on the seals which stamped them. The seals, therefore, were not, strictly speaking, appropriate for sphragistic purposes. Perhaps they were pendants, buttons, rings, or the like - objects which displayed their decoration directly.

Also belonging to this second group is the hieroglyphic seal impression on no. 478 (figs. 75 and 76). The Egyptian sign for *d*d bisects the impression into a top and a bottom panel, each showing two of Evans' Cretan sign 13; in addition, the top register contains Evans' sign 32 (?) and a representation of a sauceboat (a vase-ideogram?), while the bottom register contains Evans' sign 122, a circle (sign 109?), and the representation of a waterbird. This impression represents, so far as I know, the earliest hieroglyphic seal from the Aegean area[12]).

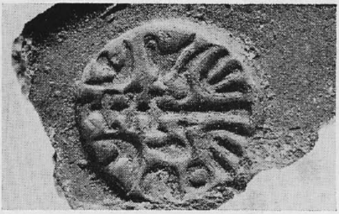

Fig. 75: CMS. V Nr. 478

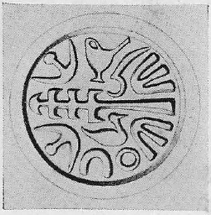

Fig. 76: CMS. V Nr. 478

The second group of Kea seal impressions is not homogeneous. It contains two of the rhythmic quadpartite designs (no. 474 and perhaps no. 461) but none of the tripartite designs found among the Lerna sealings. The group also comprises chevroned cross motifs, spiralate designs, and the hieroglyphic seal impression. However, the many parallels noted with designs from Lerna, Zygouries, and Asine suggest that this group belongs to the larger family of Early Helladic motifs which apparently stems from the Argolid (including Spetsai); other examples are known from Lefkandi, and Troy[13]).

The Cycladic group of concentric circles and spirals has certain affinities with this second group. Two other motifs, however, seem to form a separate and smaller class. An interesting design (fig. 77), unique in shape and composition, occurs on *CMS.* V no. 469. It contains a C-spiral, one

[12] Cf. E. Grumach and J. Sakellarakis, *Kadmos* 5, 1966, 109 ff. We now can add our signs to K. Branigan's list in *Kadmos* 8, 1969, 19.

[13] M. H. Wiencke, *Hesperia* 38, 1969, 518 ff., has remarked on this Early Helladic *koine* and its probable place of origin. Examples from the Argolid: Lerna (see footnote 6 above), Zygouries (see footnote 7 above), Asine (*Asine figs.* 160, 1 and 2, and 172, 5—7), Tiryns (*Tiryns* IV pls. 15, 4 and 18, 7 and 10; cf. impressed pithoi fragments pls. 16—19), Spetsai (*Hestia* 26 September 1970; I have not seen the impressed material from this site). From Lefkandi (*CMS.* V no. 423) comes a sherd bearing a design resembling no. 461; I am grateful to Mr. Mervyn Popham and Dr. David French for permission to mention this impression. Troy: Blegen, *et. al., Troy* I (Princeton 1950) fig. 408.

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hook of which forms in fact two concentric circles. No. 477 carries an extreme example of asymmetry (fig. 78), a design resembling a jigsaw puzzle. This type of composition may belong to the same family as a motif from Chalandriani (fig. 65) and one from Poliochni[14]). These four designs rely less on symmetry than the majority of the motifs from Ayia Irini. Instead, they appear to be more geometrically structured, emphasing shape rather than line.

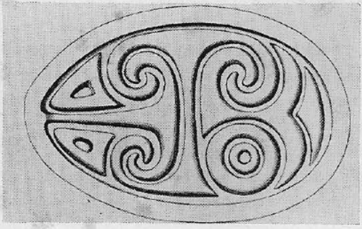

Fig. 77: CMS. V Nr. 469

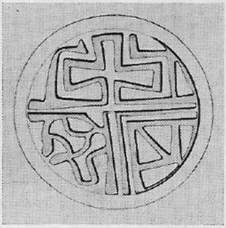

Fig. 78: CMS. V Nr. 477

It is implausible that all these motifs were created in Ayia Irini itself; perhaps a few actually were, but most probably were imported. Hypothetically, many of the seals could have been brought into Ayia Irini by itinerant hearth makers[15]). They, like the itinerant pithos maker of the Argolid[16]), wandered in or were called in to Keos to construct hearths on commission.

The Keans apparently liked their keyhole-shaped hearths decorated with

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[14]) E. H. Bossert, *JdI.* 75, 1960 figs. 11 and 12; Poliochni, *op. cit.*, pl. 129 a.

[15]) Evidence from the impressed potsherds does not contradict this hypothesis. The majority of the sherds are of the local coarse and micaceous fabric, and carry concentric circles or spirals; they may thus be locally made and stamped. One sherd (*CMS.* V no. 460), also of local fabric, carries the stamped impression of a vortex; it also may have been made locally. Two other motifs, one on no. 467 and one on no. 475, both resembling Lerna designs, appear on pots whose fine fabric may well suggest a mainland origin.

[16]) M. H. Wiencke, *Hesperia* 39, 1970, 103. For later examples of itinerant workmen see the article by Ch. Kardara, *Atti e memorie del 1° Congresso Internationale di Micenologia* II (Rome 1968) 97 ff.

the impressions of stamp seals rather than of cylinders[17]). The hearth makers would have catered to this island fashion by building the hearths *in situ* and stamping their rims. They possibly carried with them their own supply of seals collected from the various workshops they encountered in their travels on the mainland and among the islands, and thus could offer their employers a choice. On any hearth the masters could use two seals if the space on the rim demanded; they could also use the same seal on different hearths (a single seal stamped hearths K. 3895, K. 3896, K. 3897 [*CMS.* V no. 451]; another K. 3929, K. 3936 [*CMS.* V no. 455], K. 3947).

Some of the seals which the hearth makers used may not have been created originally for stamping decorations in clay. Three were possibly cosmetic, i. e., made to be worn as jewelry or the like as suggested above, since their motifs were carved in relief or cameo producing the negative designs in the impressions (the designs on *CMS.* V nos. 462, 476, 467). And the hieroglyphic design on no. 478 surely was created to mark documents or seal up objects such as chests[18]), not to decorate hearths.

Although the inhabitants of Ayia Irini probably were exposed to a variety of seal designs, perhaps because of the settlement's geographical position[19]), they appear to have selected the ones they used in accordance with some local or individual preferences. The Keans used stamp seals and not cylinders to decorate their keyhole-shaped hearths contrary to what seems to have been the mainland practice. They may have preferred the Cycladic concentric circles and spirals but seemingly also appreciated motifs such as appear at Lerna. And perhaps a few owners, by donating one of their own possessions to stamp their hearths, gave them a personal mark. I like to think that, like all cultured people, the inhabitants of Ayia Irini were sensitive to several artistic modes of expression and chose carefully the ornamentation of objects they had to live with day after day.

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[17]) The round hearths with a central depression from Lerna no. 149 and Berbati (*op. cit.* 98 ff. figs. 80—83), are decorated by cylinder seals. Some keyhole-shaped hearths, such as the ones from Keos, Tiryns, Askitario and Eutresis (footnote 3) are decorated with *Kerbschnitt*.

[18]) Cf. M. H. Wiencke, *Hesperia* 38, 1969, 513 ff. E. Fiandra, *Pepragmena tou B' Diethnous Kretologikou Synedriou* (Athen 1968) 383 ff.

[19]) Cf. J. L. Caskey, *Hesperia* 31, 1962, 266.